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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,225	03/06/2001	Branko D. Kovacevic	ATI.0100440	3322
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TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			EXAMINER VO, HUYEN X	
			ART UNIT	PAPER NUMBER

2655

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,225

Applicant(s)

KOVACEVIC, BRANKO D.

Examiner

Huyen Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-29, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21-29, and 31-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 10/5/2004, the applicant has submitted an amendment, filed 10/29/2004, amending claims 1, 7-8, 15, 19, and 27, while arguing to traverse the art rejection based on the amended limitation regarding "*determining whether to enable audio stream data related to the transport packet to be received by a system or to discard the transport packet, based upon the first outcome*" (See amendment pages 8-9). Applicant's arguments with respect to claims 1-19, 21-29, and 31 have been considered but are moot in view of the new ground(s) of rejection necessitated by amended claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-9, 11-19, 22-23, 29, and 31-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Rim et al. (US Patent No. 5841472) in view of ITU-T Recommendation H.222.0 (incorporated as reference).

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4. Regarding claims 1 and 32, Rim et al. disclose a method comprising the steps of: receiving ^{one} ~~and~~ or more transport packets (*col. 3, lines 26-30*); identifying a transport packet as containing audio stream data (*col. 3, lines 25-28, the parser unit must know what the input data is so that it can output audio, video, and PID data*); comparing a value of a first field in the transport packet to a value of a first field register to determine a first outcome (*col. 7, lines 45-67*).

Rim et al. fail to specifically disclose the step of determining whether to enable audio stream data related to the transport packet to be received by a system or to discard the transport packet, based at least in part on the first outcome. However, ITU-T teaches the step of determining whether to enable audio stream data related to the transport packet to be received by a system or to discard the transport packet, based at least in part on the first outcome (*pages 19-20*).

Since Rim et al. and ITU-T are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Rim et al. by incorporating the teaching of ITU-T in order to discard all the null packets to reduce processing power and time.

5. Regarding claim 15, Rim et al. disclose a system for parsing audio data associated with a transport packet of a packetized elementary stream (figure 4), the system comprising: a data bus having a predetermined number of nodes for transmitting a plurality of data words (*col. 4, lines 1-5*); a transport packet parser (*element 11 of figure 4*) having: a storage location having an output coupled to the data

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bus (*element 21a of figure 4*), the storage location to store a value identifying a first data word, wherein the first data word has an audio packet indicator (*col. 3, lines 24-35, where PID represent packet identifier*); a comparator having a first input coupled to the output of the storage location and an output coupled to an audio parser (*output of parser 11 is connected to CPU Interface Unit 14 as shown in figures 3 and 4. The CPU Interface Unit 14 of figures 3-4 performs the comparison process described in col. 7, lines 45 to col. 8, lines 10*); the audio parser having an enable input coupled to the comparator of the transport packet parser (*col. 7, lines 37-44*), the audio parser further includes: a first storage location having an output coupled to the data bus (*51 of figure 5*), the first storage location to store a first value representing a valid data word having the first audio packet indicator (*col. 5, line 51 to col. 6, line 35, or referring to figures 5-6*); a second storage location for storing a second value representing a comparable audio packet indicator (*col. 6, lines 27-*); a first audio packet filter for analyzing the first value with respect to the second value (*col. 7, lines 45 to col. 8, lines 10, by comparing the two field values*); a first comparator having an input coupled to the output of the first storage location of an audio parser and an output (*output of parser 11 is connected to CPU Interface unit 14 as shown in figures 3 and 4. The CPU Interface Unit 14 of figures 3-4 performs the comparison process described in col. 7, line 45 to col. 8, line 10*); and an audio decoding system having an input coupled to the output of the first comparator of the audio parser, the audio decoding system including an elementary stream formatter for processing audio data associated with the data word into an elementary

stream (the input of decoder 15 is coupled to transport parser 11 in figure 3 and referring to figure 11 and/or col. 7, lines 9-67, particularly, lines 9-21).

Rim et al. fail to specifically disclose that the audio decoding system is enabled to process the audio data or to discard the audio data associated with the data word based at least in part on the output of the first comparator. However, ITU-T teaches that the audio decoding system is enabled to process the audio data or to discard the audio data associated with the data word based at least in part on the output of the first comparator (*pages 19-20*).

Since Rim et al. and ITU-T are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Rim et al. by incorporating the teaching of ITU-T in order to discard all the null packets to reduce processing power and time.

6. Regarding claim 2, Rim et al. further disclose a decoding system (figure 4) and a method further includes providing the audio stream data related to the transport packet to a decoding system (*col. 3, lines 31-45*).

7. Regarding claim 3, Rim et al. further disclose that the audio stream data includes PES audio data (*col. 4, lines 23-32*).

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8. Regarding claims 4 and 16, Rim et al. further disclose that the decoding system detects an audio stream data property through a stream indicator included in the audio stream data (*that is a set of PID, col. 7, line 45 to col. 8, line 9*).

9. Regarding claim 5, Rim et al. further disclose that the data property includes an audio type (*col. 3, lines 62-67*).

10. Regarding claim 7, Rim et al. further disclose that the stream indicator includes one or more start codes (*col. 4, lines 23-40*).

11. Regarding claim 8, Rim et al. fail to specifically disclose that stream indicator includes one or more presentation time stamps. However, ITU-T teaches that stream indicator includes one or more presentation time stamps (*page 4, particularly 2.1.39*).

Since Rim et al. and ITU-T are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Rim et al. by incorporating the teaching of ITU-T in order to specify to the decoder when to decode the packets.

12. Regarding claim 9, Rim et al. further disclose that the audio decoding system includes an MPEG audio decoder (*col. 3, lines 22-26*).

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13. Regarding claim 11, Rim et al. further disclose that the decoding system is capable of generating an interrupt to control receiving the audio data related to the transport packet (*col. 3, line 22 to col. 4, line 5*).

14. Regarding claim 13, Rim et al. further disclose the step of providing audio data related to the transport packet to memory (*col. 3, lines 24-30*).

15. Regarding claims 14 and 17, Rim et al. further disclose the step of providing audio data related to the transport packet to memory includes bus-mastering the audio data related to the transport packet to memory (*col. 3, line 48 to col. 4, line 40*).

16. Regarding claim 18, Rim et al. further disclose that bus master controller is to bus-master a representative of the first data word from the audio parser to memory (*col. 4, lines 8-22 or referring to figure 4*).

17. Regarding claim 19, Rim et al. further disclose that the audio decoder processes a representative of the first data word from the audio parser into audio data (*subunits 15 and 20-24 of figure 4, or refer to col. 4, lines 8-22*).

18. Regarding claim 29, Rim et al. further disclose that the audio decoding system is represented through hardware (*figures 3-4*).

19. Regarding claim 31, Rim et al. further disclose that the audio decoding system includes an MPEG audio decoder (*col. 3, lines 22-26*).

20. Regarding claims 12 and 22-23, Rim et al. further disclose that the audio decoding system is capable of generating an interrupt in response to a request for a particular portion of audio data to be processed by the audio parser (*col. 7, line 45 to col. 8, line 39*), and the request is generated through an application (*col. 14, lines 52-60*).

21. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rim et al. (US Patent No. 5841472) in view of ITU-T Recommendation H.222.0 (incorporated as reference), and further in view of Takahashi et al. (US Patent No. 6449352).

22. Regarding claim 6, the modified Rim et al. fail to specifically disclose that the data property includes a sampling rate. However, Takahashi et al. teach that the data property includes a sampling rate (*col. 11, lines 58 to col. 12, lines 15*).

Since the modified Rim et al. and Takahashi et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Rim et al. by incorporating the teaching of Takahashi et al. in order to allow the decoding system to process data appropriately to avoid errors.

23. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rim et al. (US Patent No. 5841472) in view of ITU-T Recommendation H.222.0 (incorporated as reference), and further in view of Van Steenbrugge (US Patent No. 6076062).

24. Regarding claims 10 and 21, the modified Rim et al. fail to specifically disclose that the decoding system includes an I2S formatter. However, Van Steenbrugge teaches disclose that the decoding system includes an I2S formatter (col. 7, ln. 44-50).

Since the modified Rim et al. and Van Steenbrugge are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Rim et al. by incorporating the teaching of Van Steenbrugge in order to allow ^{the} system using the I2S format to process the incoming data.

25. Claims 24-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rim et al. (US Patent No. 5841472) in view of ITU-T Recommendation H.222.0 (incorporated as reference), and further in view of Graham-Cumming, Jr. (US Patent No. 6182146).

26. Regarding claim 24, the modified Rim et al. fail to specifically disclose that the decoding system is capable of identifying an audio property of the representative of the first data word through a second audio packet indicator. However, Graham-Cumming,

Jr. teaches that the decoding system is capable of identifying an audio property of the representative of the first data word through a second audio packet indicator (col. 10, ln. 9-67).

Since the modified Rim et al. and Graham-Cumming, Jr. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Rim et al. by incorporating the teaching of Graham-Cumming, Jr. in order to make sure that the system identifies every packet in the data stream to enhance system's efficiencies.

27. Regarding claim 25, Rim et al. further disclose that the data property includes audio type (col. 3, ln. 62-67).

28. Regarding claim 27, Rim et al. further disclose that the stream indicator includes one or more start codes (col. 4, ln. 23-40).

29. Regarding claim 28, the modified Rim et al. fail to specifically disclose that the second audio packet indicator includes a presentation time stamps. However, ITU-T teaches that the second audio packet indicator includes a presentation time stamps (*page 4, particularly 2.1.39*).

Since Rim et al. and ITU-T are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the

time of invention to modify Rim et al. by incorporating the teaching of ITU-T in order to specify to the decoder when to decode the packets.

30. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rim et al. (US Patent No. 5841472) in view of ITU-T Recommendation H.222.0 (incorporated as reference), further in view of Graham-Cumming, Jr. (US Patent No. 6182146) and further in view of Takahashi et al. (US Patent No. 6449352).

31. Regarding claim 26, the modified Rim et al. fails to specifically disclose that the data property includes a sampling rate. However, Takahashi et al. teach that the data property includes a sampling rate (col. 11, ln. 58 to col. 12, ln. 15). The advantage of using the teaching of Takahashi et al. in the modified Rim et al. is to allow the decoding system to process data appropriately to avoid errors.

Since the modified Rim et al. and Takahashi et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Rim et al. by incorporating the teaching of Takahashi et al. in order to allow the decoding system to process data appropriately to avoid errors.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

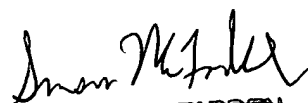
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Huyen X. Vo

February 25, 2005


SUSAN MCFADDEN
PRIMARY EXAMINER